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Sequence Listing was accepted.
If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).
Reviewer: Saleem, Syed (ASRC)
Timestamp: [year=2010; month=5; day=18; hr=12; min=25; sec=58; ms=514; ]
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Application No: 10528748   Version No: 4.0

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Output Set:

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Finished: 2010-05-12 17:26:14.762
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Total Errors: 0
No. of SeqIDs Defined: 41
Actual SeqID Count: 41

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Input Set:

Output Set:

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Total Errors:	0
No. of SeqIDs Defined:	41
Actual SeqID Count:	41

Error code   Error Description

This error has occured more than 20 times, will not be displayed

SEQUENCE LISTING

<110>   Mologen Forschungs-, Entwicklungs- und Vertriebs GmbH

<120>   VACCINE AGAINST ONCOVIRUS INFECTIONS SUCH AS INFECTIONS BY FELINE
        LEUKOSIS VIRUS OF THE CAT

<130>   80512US

<140>   10528748
<141>   2006-03-13

<150>   DE 102 44 863.9
<151>   2002-09-23

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<170>   PatentIn version 3.5

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<212>   DNA
<213>   Feline leukemia virus

<220>
<221>   gene
<222>   (1)..(1929)
<223>   DNA sequence wild type "env" gene without signal peptide coding
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<309>   2001-02-21
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tctatgttag gaaccttaac cgatgcctac cctaccctac atgttgactt atgtgaccta   240

gtgggagaca cctgggaacc tatagtccta aacccaacca atgtaaaaca cggggcacgt   300

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acccagaggc cccaaacgaa tgaaagcgcc ccaaggtctg ttgcccccac caccatgggt       840

cccaaacgga ttgggaccgg agataggtta ataaatttag tacaagggac atacctagcc       900

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ccctattacg aagggattgc aatcttaggt aactacagca accaaacaaa ccccccccca      1020

tcctgcctat ctactccgca acacaaacta actatatctg aagtatcagg gcaaggaatg      1080

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ctcctcttcg gcccatgcat ccttaaccga ttagtacaat cgtaaaaga cagaatatct       1860

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<212>  DNA
<213>  Feline leukemia virus


<220>
<221>  gene
<222>  (1)..(1527)
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<223> DNA sequence wild type "gag" gene

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gccgaatggg taatgatgaa tgtaggttgg ccccgagaag gaactttcac cattgacaat   180

atttcacagg tcgaggagag aatcttcgcc ccggggccat atggacaccc agatcaaatc   240

ccttatatta ccacgtggag atccctagcc acagacccc ctccatgggt tcgcccattc   300

ctacccctc ctaagcatcc caggacagat cctcccgagc ctctttcgcc gcaacctctt   360

gcgccgcaac cctcttcccc ccacccgtc ctctaccccg ttctccccaa accagacccc   420

cccaaggcgc ctgtattacc acccaatcct tcttcccctt taattgatct cttaacagaa   480

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actgcctccc cgattgccat ccggctgcga gaacgacgag aaaatccagc tgagaaatct   600

caagccctcc ccttaaggga agacccaaac aacagacccc agtactggcc attctcggcc   660

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actaacctaa ttgagtccat tttagtgaca catcagccaa cctgggacga ctgccaacag   780

ctcttacagg ctctcctgac ggcagaggag agacaaaggg tcctccttga gcccgaaag   840

caagttccag gcgaggacgg acggccaacc cagctgccca atgtcgttga cgaggctttc   900

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aaagaggctt acagaatgta tactccctat gaccctgagg acccagggca ggctgctagt   1140

gttatcctgt cctttatcta ccagtctagc ccggacataa gaaataagtt acaaaggcta   1200

gaaggcctac aggggttcac actgtctgat ttgctaaaag aggcagaaaa gatatacaac   1260

aaaagggaaa ccccagagga aagggaagaa agattatggc agcggcagga agaaagagat   1320

aaaaagcgcc ataaggagat gactaaagtt ctggccacag tagttgctca gaatagagat   1380

aaggatagag gggaaagtaa actgggagat caaaggaaaa tacctctggg gaaagaccag   1440

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aaacccgcca actccactct cctctaa   1527

<210> 3

<211> 642
<212> PRT
<213> Feline leukemia virus

<220>
<221> PEPTIDE
<222> (1)..(447)
<223> Amino acid sequence of the protein corresponding to Seq.ID1

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Trp Asn Leu Ala Phe Leu Val Gly Ile Leu Phe Thr Ile Asp Ile Gly
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Met Ala Asn Pro Ser Pro His Gln Ile Tyr Asn Val Thr Trp Val Ile
        35   40   45

Thr Asn Val Gln Thr Asn Thr Gln Ala Asn Ala Thr Ser Met Leu Gly
    50   55   60

Thr Leu Thr Asp Ala Tyr Pro Thr Leu His Val Asp Leu Cys Asp Leu
65   70   75   80

Val Gly Asp Thr Trp Glu Pro Ile Val Leu Asn Pro Thr Asn Val Lys
                85   90   95

His Gly Ala Arg Tyr Ser Ser Ser Lys Tyr Gly Cys Lys Thr Thr Asp
            100   105   110

Arg Lys Lys Gln Gln Gln Thr Tyr Pro Phe Tyr Val Cys Pro Gly His
        115   120   125

Ala Pro Ser Leu Gly Pro Lys Gly Thr His Cys Gly Gly Ala Gln Asp
    130   135   140

Gly Phe Cys Ala Ala Trp Gly Cys Glu Thr Thr Gly Glu Ala Trp Trp
145   150   155   160

Lys Pro Thr Ser Ser Trp Asp Tyr Ile Thr Val Lys Arg Gly Ser Ser
                165   170   175

Gln Asp Asn Ser Cys Glu Gly Lys Cys Asn Pro Leu Val Leu Gln Phe

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                180                     185                     190


Thr Gln Lys Gly Arg Gln Ala Ser Trp Asp Gly Pro Lys Met Trp Gly
     195                     200                     205


Leu Arg Leu Tyr Arg Thr Gly Tyr Asp Pro Ile Ala Leu Phe Thr Val
     210                     215                     220


Ser Arg Gln Val Ser Thr Ile Thr Pro Pro Gln Ala Met Gly Pro Asn
225                     230                     235                     240


Leu Val Leu Pro Asp Gln Lys Pro Pro Ser Arg Gln Ser Gln Thr Gly
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Ser Lys Val Ala Thr Gln Arg Pro Gln Thr Asn Glu Ser Ala Pro Arg
                260                     265                     270


Ser Val Ala Pro Thr Thr Met Gly Pro Lys Arg Ile Gly Thr Gly Asp
                275                     280                     285


Arg Leu Ile Asn Leu Val Gln Gly Thr Tyr Leu Ala Leu Asn Ala Thr
     290                     295                     300


Asp Pro Asn Lys Thr Lys Asp Cys Trp Leu Cys Leu Val Ser Arg Pro
305                     310                     315                     320


Pro Tyr Tyr Glu Gly Ile Ala Ile Leu Gly Asn Tyr Ser Asn Gln Thr
                325                     330                     335


Asn Pro Pro Pro Ser Cys Leu Ser Thr Pro Gln His Lys Leu Thr Ile
                340                     345                     350


Ser Glu Val Ser Gly Gln Gly Met Cys Ile Gly Thr Val Pro Lys Thr
                355                     360                     365


His Gln Ala Leu Cys Asn Lys Thr Gln Gln Gly His Thr Gly Ala His
     370                     375                     380


Tyr Leu Ala Ala Pro Asn Gly Thr Tyr Trp Ala Cys Asn Thr Gly Leu
385                     390                     395                     400


Thr Pro Cys Ile Ser Met Ala Val Leu Asn Trp Thr Ser Asp Phe Cys
                405                     410                     415
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Val Leu Ile Glu Leu Trp Pro Arg Val Thr Tyr His Gln Pro Glu Tyr
            420   425   430

Val Tyr Thr His Phe Ala Lys Ala Val Arg Phe Arg Arg Glu Pro Ile
            435   440   445

Ser Leu Thr Val Ala Leu Met Leu Gly Gly Leu Thr Val Gly Gly Ile
            450   455   460

Ala Ala Gly Val Gly Thr Gly Thr Lys Ala Leu Leu Glu Thr Ala Gln
465   470   475   480

Phe Arg Gln Leu Gln Met Ala Met His Thr Asp Ile Gln Ala Leu Glu
                485   490   495

Glu Ser Ile Ser Ala Leu Glu Lys Ser Leu Thr Ser Leu Ser Glu Val
            500   505   510

Val Leu Gln Asn Arg Arg Gly Leu Asp Ile Leu Phe Leu Gln Glu Gly
            515   520   525

Gly Leu Cys Ala Ala Leu Lys Glu Glu Cys Cys Phe Tyr Ala Asp His
            530   535   540

Thr Gly Leu Val Arg Asp Asn Met Ala Lys Leu Arg Glu Arg Leu Lys
545   550   555   560

Gln Arg Gln Gln Leu Phe Asp Ser Gln Gln Gly Trp Phe Glu Gly Trp
                565   570   575

Phe Asn Lys Ser Pro Trp Phe Thr Thr Leu Ile Ser Ser Ile Met Gly
                580   585   590

Pro Leu Leu Ile Leu Leu Leu Ile Leu Leu Phe Gly Pro Cys Ile Leu
            595   600   605

Asn Arg Leu Val Gln Phe Val Lys Asp Arg Ile Ser Val Val Gln Ala
            610   615   620

Leu Ile Leu Thr Gln Gln Tyr Gln Gln Ile Lys Gln Tyr Asp Pro Asp
625   630   635   640

Arg Pro

<210>   4
<211>   508
<212>   PRT
<213>   Feline leukemia virus

<220>
<221>   PEPTIDE
<222>   (1)..(508)
<223>   Amino acid sequence of the protein corresponding to Seq.ID2

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Ser Glu Val Gln Ala Arg Ala Arg Asn Gln Gly Val Glu Val Arg Lys
            20   25   30

Lys Lys Trp Ile Thr Leu Cys Glu Ala Glu Trp Val Met Met Asn Val
        35   40   45

Gly Trp Pro Arg Glu Gly Thr Phe Thr Ile Asp Asn Ile Ser Gln Val
    50   55   60

Glu Glu Arg Ile Phe Ala Pro Gly Pro Tyr Gly His Pro Asp Gln Ile
65   70   75   80

Pro Tyr Ile Thr Thr Trp Arg Ser Leu Ala Thr Asp Pro Pro Pro Trp
                85   90   95

Val Arg Pro Phe Leu Pro Pro Pro Lys His Pro Arg Thr Asp Pro Pro
            100   105   110

Glu Pro Leu Ser Pro Gln Pro Leu Ala Pro Gln Pro Ser Ser Pro His
        115   120   125

Pro Val Leu Tyr Pro Val Leu Pro Lys Pro Asp Pro Pro Lys Ala Pro
    130   135   140

Val Leu Pro Pro Asn Pro Ser Ser Pro Leu Ile Asp Leu Leu Thr Glu
145   150   155   160

```
Glu Pro Pro Pro Tyr Pro Gly Gly His Gly Pro Thr Pro Pro Ser Gly
            165                 170               175


Pro Arg Thr Pro Thr Ala Ser Pro Ile Ala Ile Arg Leu Arg Glu Arg
            180                 185               190


Arg Glu Asn Pro Ala Glu Lys Ser Gln Ala Leu Pro Leu Arg Glu Asp
            195                 200               205


Pro Asn Asn Arg Pro Gln Tyr Trp Pro Phe Ser Ala Ser Asp Leu Tyr
    210                 215               220


Asn Trp Lys Leu His Asn Pro Pro Phe Ser Gln Asp Pro Val Ala Leu
225                 230               235               240


Thr Asn Leu Ile Glu Ser Ile Leu Val Thr His Gln Pro Thr Trp Asp
            245                 250               255


Asp Cys Gln Gln Leu Leu Gln Ala Leu Leu Thr Ala Glu Glu Arg Gln
            260                 265               270


Arg Val Leu Leu Glu Ala Arg Lys Gln Val Pro Gly Glu Asp Gly Arg
            275                 280               285


Pro Thr Gln Leu Pro Asn Val Val Asp Glu Ala Phe Pro Leu Thr Arg
    290                 295               300


Pro Asn Trp Asp Phe Cys Thr Pro Ala Gly Arg Glu His Leu Arg Leu
305                 310               315               320


Tyr Arg Gln Leu Leu Leu Ala Gly Leu Arg Gly Ala Ala Arg Arg Pro
            325                 330               335


Thr Asn Leu Ala Gln Val Lys Gln Val Val Gln Gly Lys Glu Glu Thr
            340                 345               350


Pro Ala Ser Phe Leu Glu Arg Leu Lys Glu Ala Tyr Arg Met Tyr Thr
            355                 360               365


Pro Tyr Asp Pro Glu Asp Pro Gly Gln Ala Ala Ser Val Ile Leu Ser
    370                 375               380
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Phe Ile Tyr Gln Ser Ser Pro Asp Ile Arg Asn Lys Leu Gln Arg Leu
385                 390             395                 400


Glu Gly Leu Gln Gly Phe Thr Leu Ser Asp Leu Leu Lys Glu Ala Glu
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Lys Ile Tyr Asn Lys Arg Glu Thr Pro Glu Glu Arg Glu Glu Arg Leu
                420             425             430


Trp Gln Arg Gln Glu Glu Arg Asp Lys Lys Arg His Lys Glu Met Thr
        435             440             445


Lys Val Leu Ala Thr Val Val Ala Gln Asn Arg Asp Lys Asp Arg Gly
        450             455             460


Glu Ser Lys Leu Gly Asp Gln Arg Lys Ile Pro Leu Gly Lys Asp Gln
465             470             475             480


Cys Ala Tyr Cys Lys Glu Lys Gly His Trp Val Arg Asp Cys Pro Lys
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<212>   DNA
<213>   Feline leukemia virus


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atcagccagg tggaggagag gatcttcgcc cccggcccct acggccaccc cgaccagatc     240

ccctacatca ccacctggag gagcctggcc accgaccccc cccctggggt gaggcccttc     300

ctgcccccccc ccaagcaccc caggaccgac cccccgagc ccctgagccc ccagcccctg     360

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aagcaggtgc ccggcgagga cggcaggccc acccagctgc ccaacgtggt ggacgaggcc      900

ttccccctga ccaggcccaa ctgggacttc tgcaccccccg ccggcaggga gcacctgagg      960

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